



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R08-OAR-2020-0646; FRL-10021-65-Region 8]

Approval and Promulgation of Implementation Plans; Utah; 2017 Base Year Inventories for the 2015 8-Hour Ozone National Ambient Air Quality Standard for the Uinta Basin, Northern Wasatch Front and Southern Wasatch Front Nonattainment Areas

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a state implementation plan (SIP) revision submitted by the State of Utah. The revision fulfills the base year inventory requirement for the 2015 8-hour ozone national ambient air quality standard (NAAQS) for the Uinta Basin, Northern Wasatch Front, and Southern Wasatch Front nonattainment areas. Utah submitted the base year emissions inventories to meet, in part, the nonattainment requirements for Marginal ozone nonattainment areas under the 2015 8-hour ozone NAAQS. EPA is taking this action pursuant to sections 110, 172, and 182 of the Clean Air Act (CAA).

DATES: Written comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R08-OAR-2020-0646, to the Federal Rulemaking Portal: <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from www.regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is

considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available electronically in www.regulations.gov. To reduce the risk of COVID-19 transmission, for this action we do not plan to offer hard copy review of the docket. Please email or call the person listed in the **FOR FURTHER INFORMATION CONTACT** section if you need to make alternative arrangements for access to the docket.

FOR FURTHER INFORMATION CONTACT: Matthew Lang, Air and Radiation Division, EPA, Region 8, Mailcode 8ARD-IO, 1595 Wynkoop Street, Denver, Colorado, 80202-1129, (303) 312-6709, lang.matthew@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document wherever “we,” “us,” or “our” is used, we mean EPA.

I. Background

Ground-level ozone is formed when nitrogen oxides (NO_x) and volatile organic compounds (VOCs) react in the presence of sunlight. Referred to as ozone precursors, these two pollutants are emitted by many types of pollution sources, including motor vehicles, power plants, industrial facilities, and area wide sources, such as consumer products and lawn and garden equipment. Scientific evidence indicates that adverse public health effects may occur following exposure to ozone pollution. These effects are more pronounced in children and adults

with lung disease. Breathing air containing ozone can reduce lung function and inflame airways, which can increase respiratory symptoms and aggravate asthma or other lung diseases. In 1979, in response to this scientific evidence, EPA promulgated the first ozone NAAQS, the 0.12 part per million (ppm) 1-hour ozone NAAQS.¹ EPA had previously promulgated a NAAQS for total photochemical oxidants.

On July 18, 1997, EPA promulgated a revised ozone NAAQS of 0.08 ppm, averaged over eight hours.² EPA determined this standard to be more protective of public health than the previous 1979 1-hour ozone standard. In 2008, EPA revised the 8-hour ozone NAAQS from 0.08 to 0.075 ppm.³ On October 26, 2015, EPA again strengthened the 8-hour ozone NAAQS to 0.070 ppm, based on extensive scientific evidence about ozone's effects on public health and welfare.⁴ Effective August 3, 2018, EPA designated the Uinta Basin, Northern Wasatch Front, and Southern Wasatch Front areas as Marginal nonattainment for the more stringent 2015 8-hour ozone NAAQS.⁵

The Uinta Basin Nonattainment Area (NAA) is comprised of portions of Duchesne and Uintah Counties. The Northern Wasatch Front NAA includes Salt Lake, Davis, and portions of Weber and Tooele Counties. The Southern Wasatch Front NAA is comprised of only a portion of Utah County.

Under section 172(c)(3) of the CAA, Utah is required to submit comprehensive, accurate, and current inventories of actual emissions from all sources of the relevant pollutants in its Marginal nonattainment areas, i.e., the Uinta Basin NAA, Northern Wasatch Front NAA, and Southern Wasatch Front NAA.⁶ Specific to areas classified as Marginal ozone nonattainment,

¹ Revisions to the National Ambient Air Quality Standards for Photochemical Oxidants, 44 FR 8202 (Feb. 8, 1979).

² National Ambient Air Quality Standards for Ozone, 62 FR 38856.

³ National Ambient Air Quality Standards for Ozone, 73 FR 16436 (March 27, 2008).

⁴ National Ambient Air Quality Standards for Ozone, 80 FR 65292.

⁵ Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards, 83 FR 25776 (June 4, 2018).

⁶ 42 U.S.C. 7502(c)(3)

CAA section 182(a)(1) requires that a base year inventory of ozone precursors be submitted within two years of the nonattainment designation.⁷

EPA's guidance for emissions inventory development specifically calls for states to report "ozone season day emissions" in the base year inventory.⁸ EPA's regulations define ozone season day emissions as an average day's emissions for a typical ozone season work weekday.⁹ Although elevated ground-level ozone is typically a summertime issue for many areas, high ground-level ozone can occur during the winter with the presence of temperature inversions and snow cover as well as sufficient solar radiation and ozone precursors.

CAA sections 172 and 182 identify additional plan submissions and requirements for ozone nonattainment areas. Under sections 172(c)(5) and 182(a)(3)(B) of the CAA, Utah is required to implement a nonattainment new source review permit program and emission statement requirement, respectively.¹⁰ EPA will act on SIP revisions that address these two requirements separately from the base year emissions inventories at issue in this action.

II. Summary of SIP Revision

On July 30, 2020, the Utah Division of Air Quality (UDAQ) submitted a SIP revision titled "2017 Marginal Ozone Inventories" to satisfy the emission inventory requirements under CAA sections 172(c)(3) and 182(a)(1).¹¹ On January 28, 2021, UDAQ submitted a superseding supplement to the earlier submission, which corrected and explained administrative errors in Utah's SIP revision.¹² Utah met the reasonable notice and public hearing requirements of CAA section 110(a) for the SIP revision through reasonable notice posted on June 11, 2020, and notice of a public hearing for July 16, 2020.¹³

⁷ Id. 7511a(a)(1).

⁸ EPA, Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations, May 2017, 21, 45, 75.

⁹ 40 CFR 51.1300(q).

¹⁰ 42 U.S.C.7502(c)(5); 7511a(a)(3)(B).

¹¹ Letter dated July 29, 2020, from Gary R. Herbert, Governor, State of Utah, to Gregory Sopkin, Regional Administrator, EPA, Region 8.

¹² Utah, Utah Administrative Documentation, Marginal Ozone Inventory Supplement, January 2021 ("UT SIP Revision").

¹³ Id. at 68, 86-87, 107-108.

Utah’s SIP revision uses 2017 as its base year for SIP planning purposes, as recommended in EPA’s implementation rule for the 2015 Ozone NAAQS.¹⁴ The 2017 base year inventories represent NO_x and VOC emissions estimates for an average episode day (work weekday) during the peak ozone season of an area. For the Uinta Basin NAA, an average episode day during the peak ozone season is in February. For the Northern Wasatch Front NAA and Southern Wasatch Front NAA, an average episode day during the peak ozone season is in July.¹⁵ The inventories were developed for all major source categories including point sources, area (nonpoint) sources, and mobile sources, including both nonroad mobile and on-road mobile sources.¹⁶ Additionally, the Uinta Basin NAA inventory included a separate oil and gas source category.¹⁷ Emissions sources in the Uinta Basin are located both in state land and in Indian country. We note that the Uinta Basin portion of Utah’s SIP revision includes only emissions from sources located on state lands within the Uinta Basin NAA.¹⁸

Tables 1-3 of this document summarize the 2017 VOC and NO_x emission inventory by source sector for the Uinta Basin NAA, Northern Wasatch Front NAA, and Southern Wasatch Front NAA. Ozone season weekday emissions are given in tons per day (tpd).

TABLE 1—UINTA BASIN NONATTAINMENT AREA 2017 VOC AND NO_x BASELINE EMISSIONS INVENTORY [Tons/Day]¹⁹

Source Type	NO _x	VOC
Point	1.07	0.73
Nonpoint	0.22	1.46
On-road Mobile	3.24	1.22
Nonroad Mobile	0.1	0.11
Oil & Gas	10.61	37.4
Total	15.24	40.93

¹⁴ Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements, 83 FR 62998, 63004-05, 63011 n.29 (December 6, 2018).

¹⁵ UT SIP Revision at 92, 98, 103.

¹⁶ Id. at 93, 99, 104.

¹⁷ Note that Utah included oil and gas emissions as area sources for the Northern and Southern Wasatch NAAs. See, e.g., UDAQ, Area Source Inventories, April 2, 2020.

¹⁸ UT SIP Revision at 95. See also 40 CFR 51.1, 51.15(b).

¹⁹ Id. at 95; Note that the Uinta Basin inventory represents only emissions from State land in the Uinta Basin NAA.

TABLE 2—NORTHERN WASATCH FRONT NONATTAINMENT AREA 2017 VOC AND NO_x BASELINE EMISSIONS INVENTORY [Tons/Day]²⁰

Source Type	NO _x	VOC
Point	18.83	5.88
Nonpoint	1.25	44.48
On-road Mobile	52.46	28.56
Nonroad Mobile	27.59	18.54
Total	100.12	97.46

TABLE 3—SOUTHERN WASATCH FRONT NONATTAINMENT AREA 2017 VOC AND NO_x BASELINE EMISSIONS INVENTORY [Tons/Day]²¹

Source Type	NO _x	VOC
Point	1.25	0.21
Nonpoint	0.56	13.1
On-road Mobile	14.93	7.07
Nonroad Mobile	5.18	3.67
Total	21.92	24.06

Point sources are large, stationary, identifiable sources of emissions that release pollutants into the atmosphere. For Utah’s 2017 base year inventories, the State determined point source emissions in the three nonattainment areas from source-reported data in the UDAQ State and Local Emissions Inventory System (SLEIS) database, which includes any source that has the potential to emit greater than or equal to 100 tons per year of NO_x or VOCs. The point source actuals are reported in tons per year.²² Utah’s SIP revision uses the emissions processing software SMOKE (Sparse Matrix Operator Kernel Emissions) to distribute inventoried pollutants in time and space, including to a 24-hour period.²³ The SMOKE Emissions Processing technical support document included with Utah’s SIP revision describes the processing software in greater detail.²⁴ A further description of the point source emissions inventory is found in the Base Year Ozone SIP Point Source Inventory technical support document included with Utah’s SIP revision.²⁵

²⁰ Id. at 100.

²¹ Id. at 105.

²² See, e.g., id. at 95.

²³ Id. at 94, 100, 105

²⁴ UDAQ, SMOKE Emissions Processing, June 10, 2020.

²⁵ Utah, Base Year Ozone SIP Point Source Inventory (listing point sources by NAA).

Nonpoint sources, also known as area sources, are sources of pollution that are small and numerous, and that have not been inventoried as specific point or mobile sources. They include a wide range of sources including, for example, dry cleaners, residential heating and cooling, auto body painting, and consumer solvents. To inventory nonpoint sources, sources are grouped so that emissions can be estimated collectively using one methodology. For Utah's 2017 base year emissions inventories, the State determined area emissions from UDAQ's area source emissions calculation workbooks that are the foundation for data in the 2017 National Emissions Inventory (NEI).²⁶

The on-road mobile source portion of the State's 2017 base year inventories includes emissions from vehicles, such as cars, trucks, trash trucks, over-the-road diesel trucks, and buses, which are operated on public roadways. These emissions were estimated using EPA's Motor Vehicle Emissions Simulator (MOVES) model version MOVES2014b. Metropolitan planning organizations (MPOs) determined on-road emissions for the urban nonattainment areas. The Utah Department of Transportation (UDOT) determined on-road emissions for rural nonattainment counties and UDAQ determined emissions in rural counties in attainment. The on-road mobile source portion of the inventories for the Uinta Basin NAA, Northern Wasatch Front NAA, and Southern Wasatch Area were developed by UDOT, the Wasatch Front Regional Council (WFRC) MPO and the Mountainland Association of Governments (MAG) MPO, respectively.²⁷

The On-road Mobile Sources technical support document²⁸ included with the State's submittal details MOVES modeling inputs including speeds, vehicle fuel properties and specifications, Vehicle Miles Traveled (VMT), inspection and maintenance profiles, VMT mix,

²⁶ UT SIP Revision at 93, 99, 104.

²⁷ Id. at 94, 100, 105.

²⁸ Utah provided a separate technical support document for each source sector in each of the three NAAs. Each technical support document contains largely the same material regarding methodology. Thus, for ease of reference, we will cite to the technical support document for the Northern Wasatch Front NAA unless otherwise specified. Please see the docket for specific technical support documents.

vehicle age distributions, and meteorological conditions.²⁹ VMT within the NAAs is based on their respective transportation model's output data from the UDOT, MAG, and WFRC.³⁰ The MOVES modeling used meteorological inputs for the Uinta Basin NAA based on conditions for an ozone exceedance event from February 1-10, 2013, in Uintah, Utah, and conditions on an average July day in 2017 for both the Southern Wasatch Front NAA and Northern Wasatch Front NAA. UDOT, MAG, and WFRC developed the on-road inventories in the State's submittal using MOVES 2014b default fuel parameters for diesel and compressed natural gas. The inventories adjusted gasoline fuel parameters for gasoline sulfur levels in Utah since small volume refiners were not required to comply with federal Tier 3 gasoline (10 ppm sulfur) requirements until January 1, 2020. Utah notes in the technical support document for on-road mobile sources that the EPA Office of Transportation and Air Quality (OTAQ) provided the 2017 local gasoline sulfur value of 20.9 ppm.³¹

Nonroad mobile sources are mobile sources other than on-road vehicles, including aircraft, locomotives, construction and agricultural equipment, recreational equipment like snowmobiles, and marine vessels. The 2017 base year inventory includes emissions from nonroad mobile sources, excluding aircraft and locomotives, as estimated for the Uinta Basin NAA, Northern Wasatch Front NAA, and Southern Wasatch Front NAA by EPA's Non-Road Model. EPA's Non-Road Model is incorporated into EPA's MOVES model.³²

The State prepared aircraft emissions from data reported by the 2017 NEI, and determined emissions from airport ground support equipment using the Federal Aviation Administration's Aviation Environmental Design Tool.³³ For rail yard emissions, associated with the operation of switcher engines, Utah used emissions reported by the 2017 NEI that are

²⁹ See, e.g., UDAQ, Technical Support Document for On-road Mobile Sources: Summertime 2017 Baseline Ozone Emissions Inventory for the Northern Wasatch Front, UT Nonattainment Area and Surrounding Modeling Domain in Utah, April 2020, 5.

³⁰ Id. at 6-7.

³¹ Id. at 8.

³² Utah SIP Revision at 94, 100, 105.

³³ UDAQ, Technical Support Document Non-Road Mobile Source: Ozone Inventory for 2017 Base Year, February and July, April 2020, 3, 5.

compiled by the Eastern Regional Technical Advisory Committee. Commuter rail emissions from UTA FrontRunner are also included.³⁴ The State processed the nonroad emissions for the inventories included in the State's submittal with SMOKE. Additional information describing the development of the inventory of the nonroad mobile source sector can be found in the Non-Road Mobile Source technical support document included with the State's submittal.

To inventory oil and gas emissions, Utah explains in the SIP revision that emissions within the Uinta Basin NAA were determined from workbooks submitted by sources as well as EPA/NOMAD (Nonpoint Methods Advisory group) oil and gas tool outputs.³⁵ Additionally, the State included emissions associated with off-road mobile oil and gas and nonroad oil and gas well pad construction equipment in the 2017 base year inventory for the Uinta Basin NAA. Off-road mobile oil and gas emissions are from mobile sources that operate within the oil and gas fields located in the Uinta Basin NAA and were calculated in the base year inventory from emission factors generated using MOVES2014b.³⁶ Nonroad oil and gas well equipment emissions, which include emissions from well pad, access road, and pipeline construction, were calculated from emissions factors generated by the EPA MOVES2014b Non-Road Model.³⁷ Well counts for 2017 were provided for by the UDAQ Technical Analysis Section from the Utah Division of Oil, Gas, and Mining for both the determination of oil and gas off-road mobile and nonroad emissions.³⁸

EPA has reviewed Utah's 2017 base year emission inventories' results, procedures, and methodologies for the Uinta Basin NAA, Northern Wasatch Front NAA, and Southern Wasatch Front NAA and we propose to find them approvable. EPA has concluded that the 2017 base year

³⁴ Id. at page 8.

³⁵ Utah SIP Revision at 94.

³⁶ UDAQ, Technical Support Document 2017 Baseline Wintertime Ozone Emissions Inventory: Off-road Mobile Sources Operating Within the Oil and Gas Fields Located in the Uintah, UT Nonattainment Area, March 2020, 5-6.

³⁷ UDAQ, Technical Support Document 2017 Baseline Wintertime Ozone Emissions Inventory: Non-Road Well Pad Construction Equipment Operating within the Oil and Gas Fields within the Uintah, UT Nonattainment Area, March 2020, 4.

³⁸ Id. at 5; UDAQ, Technical Support Document 2017 Baseline Wintertime Ozone Emissions Inventory: Off-road Mobile Sources Operating Within the Oil and Gas Fields Located in the Uintah, UT Nonattainment Area, March 2020, 9.

inventories are based on the most current and accurate information available to the State at the time the inventories were developed. Additionally, the 2017 inventory comprehensively addresses all source categories in Utah's NAAs and was developed consistent with the relevant EPA emission inventory guidance and models.

III. Proposed Action

As detailed in the Utah SIP Revision and summarized previously in this proposed rulemaking, the procedures used by the State in developing the 2017 base year inventories for the source sectors in the Uinta Basin NAA, Northern Wasatch Front NAA, and Southern Wasatch Front NAA satisfy the requirements of the CAA. Therefore, we are proposing to approve the 2017 base year inventories for the 2015 8-hour ozone NAAQS for the Uinta Basin, Northern Wasatch Front, and Southern Wasatch Front Marginal NAAs because the State prepared the inventories in accordance with the requirements in sections 172(c)(3) and 182(a)(1) of the CAA and its implementing regulations, including those at 40 CFR 51.1315. EPA is soliciting public comments on the issues discussed in this document. EPA will consider these comments before taking final action.

IV. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the requirements of the CAA. Accordingly, this action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);

- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Greenhouse gases, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: March 23, 2021.

Debra H. Thomas,
Acting Regional Administrator,
Region 8.

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